



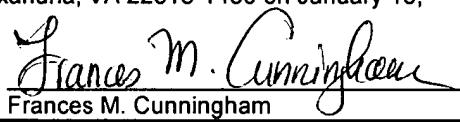
APPELLANT'S BRIEF UNDER
37 CFR §1.192

Docket No. M1025/7001

Applicant: Sterner et al.
Serial No: 09/578,236
Filed: May 24, 2000
For: Method For Producing A Plastic Film Having Improved Characteristics,
Apparatus For Performing the Method, and Film Thus Obtained
Examiner: Geoffrey Shipsides
Art Unit: 1732

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Assistant Commissioner for Patents, Board of Patent Appeals and Interferences, P.O. Box 1450, Alexandria, VA 22313-1450 on January 15, 2004.



Frances M. Cunningham

Assistant Commissioner for Patents
Board of Patent Appeals and Interferences
P.O. Box 1450
Alexandria, VA 22313-1450

This brief is in furtherance of the Notice of Appeal being filed concurrently herewith.

The fees required under § 1.17(c), and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief is transmitted in triplicate. (37 C.F.R. 1.192(a)) and contains these items under the following headings, and in the order set forth below (37 C.F.R. 1.192(c)):

I	REAL PARTY IN INTEREST.....	2
II	RELATED APPEALS AND INTERFERENCES	2
III	STATUS OF CLAIMS.....	2
IV	STATUS OF AMENDMENTS.....	2
V	SUMMARY OF INVENTION.....	2
VI	ISSUES.....	3
VII	GROUPING OF CLAIMS	3
VIII	ARGUMENTS	4
IX	APPENDIX OF CLAIMS INVOLVED IN THE APPEAL.....	9

00000001139578236

01/23/2004 TLUW11

01 FC:02

I REAL PARTIES IN INTEREST (37 C.F.R. 1.192(c)(1))

The real party in interest in this appeal is BP Europak SpA.

II RELATED APPEALS AND INTERFERENCES (37 C.F.R. 1.192(c)(2))

There are no other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III STATUS OF CLAIMS (37 C.F.R. 1.192(c)(3))

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-24.

B. STATUS OF ALL THE CLAIMS IN APPLICATION

1. Claims pending: 1-16
2. Claims canceled:
3. Claims withdrawn from consideration, but not canceled: 17-24
4. Claims allowed: none
5. Claims rejected: 1-16

C. CLAIMS ON APPEAL

The claims on appeal are: 1-16.

IV STATUS OF AMENDMENTS (37 C.F.R. 1.192(c)(4))

All amendments submitted by applicant have been entered. The Request for Reconsideration of the patentability of claims 1-16 submitted by an amendment response of May 5, 2003 was considered by the examiner as indicated in the Final Office Action dated August 18, 2003.

V SUMMARY OF INVENTION (37 C.F.R. 1.192(c)(5))

The present invention relates to the formation of plastic film for use as packaging where the plastic film is provided during an extrusion process with a desired property that is not inherent in the plastic material itself. The plastic film is formed from an extruder and then treated during the extrusion with a substance that modifies the characteristics of the plastic film

material and imparts a desired property to the film. The substance is incorporated into the body of the film at a point during the extrusion process where film is in a molten state above ambient temperature such that the applied substance is permanently incorporated into the body to modify the characteristics of the polymer or where the film material itself is modified.

In the present application, claim 1 the sole independent claim in issue on this appeal, calls for a process as just described.

In contradistinction, the primary references cited by the examiner do not disclose incorporating a substance into the body of a plastic film to modify the characteristics of the film during an extrusion process or any process where the film is in a molten state.

VI ISSUES (37 C.F.R. 1.192(c)(6))

1. Whether claims 1-5 and 16 are unpatentable under 35 U.S.C. §102(b) as anticipated by the cited Krech reference.
2. Whether claims 1-3 are unpatentable under 35 U.S.C. §102(b) as anticipated by or obvious under Section 103 over the cited Siol reference.
3. Whether claims 4 and 6 are unpatentable under Section 103 as obvious over the cited Siol reference.
4. Whether the alleged statement in the specification concerning the prior art on Pages 1 and 2 is being properly construed by the examiner.
5. Whether claims 1-16 are unpatentable under Section 103 as obvious over the alleged statement of prior art in the specification on Pages 1 and 2 in view of the cited Siol reference.

VII GROUPING OF CLAIMS (37 C.F.R. 1.192(c)(7))

Group 1: Claims 1-5 and 16. These claims stand or fall as a group with regard to the examiner's Section 102 rejection based on the Krech reference.

Group 2: Claims 4 and 6. These claims stand or fall as a group with regard to the examiner's Section 103 rejection over the cited Siol reference.

Group 3: Claims 1-16. These claims stand or fall as a group with regard to the examiner's Section 103 rejection over the alleged statement of prior art in the specification in view of the cited Siol reference.

VIII ARGUMENT (37 C.F.R. 1.192(c)(8))

Anticipation of claims 1-5 and 16 has not been established at least because the cited Krech reference does not teach the claim elements of forming, distributing, incorporating or modifying the film.

In order for a Section 102(b) anticipation to exist, all material elements recited in a claim must be found in the one unit of prior art in issue. This is as true with regard to method/process claims as it is with product/apparatus claims. Application of Marshall, 198 U.S.P.Q. 344, 578 F.2d 301 (C.C.P.A. 1978).

Claim 1 of the present application, and thus all of the claims on appeal, claims 1-16, call for (a) forming the plastic film by extrusion from an extruder nozzle, (b) distributing at least one active substance on at least one face of the film such that the active substances penetrate into and are retained within the film to form a single body of film, (c) cooling the film wherein the one or more substances are permanently incorporated in the body of the film in the solidified state to (d) modify selected characteristics of the film.

The Krech reference does not teach or disclose any of these elements of the claims.

The Krech reference deals with embedding solid particles on the surface of a plastic film by heating the particles and shooting them onto the surface of the film. The Krech particles are not an "active" substance. They do not interact with the polymer sheet material. They do not modify the properties of the polymer material. The applied particles have a physical property that remains contained within the particles themselves (such as an abrasion element).

The only purpose of the Krech process is to provide a mounting component for a solid particle, not to allow for modification of the characteristic of the polymer film material itself.

Therefore, none of the above referenced elements of the claims are anticipated or rendered obvious by the Krech reference.

It is fundamental that in order for a Section 102(b) anticipation to exist, the prior art reference must disclose all of the elements of the allegedly anticipated claims. Juicy Whip, Inc. v. Orange Bang, Inc., 63 U.S.P.Q.2d 1251, 292 F.3d 728 (Fed. Cir. 2002); Application of Marshall, 198 U.S.P.Q. 344, 578 F.2d 301 (C.C.P.A. 1978).

The claims in issue in this application are method claims. The standard for finding a Section 102(b) anticipation of a method claim is no less stringent than for an apparatus claim. In the Juicy Whip case for example, the Federal Circuit said:

When the asserted basis of invalidity is [Section 102(b) anticipation], the party with the burden of proof must show that "the subject of the barring activity met each of the limitations of the claim, and thus was an embodiment of the claimed invention." *Scaltech Inc. v. Retec/Tetra, L.L.C.*, 178 F.3d 1378, 1383, 51 USPQ2d 1055, 1058 (Fed.Cir.1999).

"Claim 6 is directed to a "method for inducing sales of a beverage" comprising the step of "positioning a transparent display bowl relative to the dispenser outlet to create the visual impression that said bowl is the reservoir and principal source from which a serving of the beverage is dispensed." '405 patent, col. 12, ll. 53-56. Claim 9 requires that the dispenser be "positioned relative to said outlet to create the visual impression that said container is the reservoir and principal source of said dispensed beverage issuing from said outlet." '405 patent, col. 13, ll. 10- 13. While the record contains testimony from several witnesses which, if believed by the jury, indicates that some of the claim limitations were found in the 1983 and 1988 dispensers, the record is devoid of evidence showing that the above limitations were found in either dispenser.

Similarly, in another method claim case, In Re Marshall, 198 U.S.P.Q. 344, 578 F.2d 301 (C.C.P.A. 1978), the appeals court (C.C.P.A.) stated:

Rejections under 35 U.S.C. s 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art. *In re Arkley*, 455 F.2d 586, 587, 59 CCPA 804, 807, 172 USPQ 524, 526 (1972). In other words, to constitute an **anticipation, all material elements** recited in a claim must be found in one unit of prior art. *Soundscriber Corp. v. United States*, 360 F.2d 954, 960, 175 Ct.Cl. 644, 148 USPQ 298, 301 (1966).

Applying this rule of law to the present case, we must reverse the board's rejection of claims 1-4 under 35 U.S.C. s 102 since the primary reference, the PDR, does not disclose every material element of the claimed subject matter. These **claims** are directed to a weight control **process**. Applicant uses an effective amount of the anesthetic, oxethazaine, to inhibit release of the pancreatic secretory hormones, secretin and pancreozymin, in order to control weight. The PDR, however, teaches using drugs containing the anesthetic oxethazaine to inhibit release of the acid-stimulating hormone, gastrin, in order to treat esophagitis, gastritis, peptic ulcer and irritable colon syndrome. Nothing in the PDR remotely suggests taking oxethazaine to lose weight

Anticipation and/or obvious of Claims 1-3 has not been established by/over the cited Siol reference, and, Claims 4 and 6 are not obvious over the cited Siol reference at least because the Siol reference does not disclose or suggest the claim elements of distributing, incorporating or modifying; and because Siol suggests the opposite.

Again, the claims in issue here are method claims and in order for a Section 102(b) anticipation to exist, the prior art reference must disclose all of the elements of the allegedly

anticipated claims. Juicy Whip, supra, 63 U.S.P.Q.2d 1251; Application of Marshall, supra, 198 U.S.P.Q. 344.

Siol (U.S. 4,184,207) describes a chemical polymerization method for deposition of co-monomers on the surface of polymer materials having an already stabilized shape, and, a subsequent heat treatment step for polymerization of the surface deposited co-monomers. In order to maintain a stable system, the substrate polymer body has to be cooled down (after the extrusion process), then it has to be coated with the co-monomers and then polymerization has to be carried out by means of heating in the absence of UV light. Siol (U.S. 4,184,207) is restricted to applying a superficial layer of radical initiated co-polymerized monomers on a single surface of a shaped body of plastic material such that the co-monomers are capable of undergoing a radical initiated reaction with each other upon a subsequent heat treatment and a subsequent cooling period in order to enable formation of the superficial layer. A scratch or weather resistant layer of cured co-polymer is thus formed on the surface of the stable body of plastic.

There are very different interactions occurring between the plastic bulk and the active substances applied in the present invention and the process described in the Siol reference. The Siol reference makes a single, vague statement in passing that the co-monomer coating can be applied directly after the extrusion process. However, there is no disclosure about the molten state of the extruded body, nor about its temperature (i.e. higher than the glass transition temperature or the room temperature), and, there is the explicit requirement that the deposition must allow for co-polymerization and curing upon heat treatment and cooling. This process, as described, suggests to a person skilled in the art that the co-monomers are deposited as a superficial layer of homogenous molecules, in immediate molecular level adjacency to each other to enable chemical reaction between the co-monomers such that the co-monomer molecules will react when heat treatment is applied. And, a subsequent cooling period is required for curing. That is, the Siol process requires a radical transfer between co-monomers where the molecules are physically adjacent to other to ensure propagation of radical polymerization between physically adjacent co-monomer molecules.

The present invention calls for distributing at least one active substance on at least one face of the film in a region of the film having a temperature higher than the ambient temperature such that the active substance(s) penetrate into and are retained within the film to form a single body of film and modifies the characteristics of the base polymer film.

The intention and teaching of Siol (U.S. 4,184,207) is the enablement of co-monomer polymerization conditions on a surface of a stable body. The purpose of Siol is "not" to modify the characteristics of the film itself but rather to place a layer of another substance on the "surface" of the film. To modify or read into the Siol reference the steps of the presently claimed

invention, would defeat the intended function and disclosure of Siol. Siol's teaching of placing a surface layer on the base polymer film teaches away from the present invention.

Clearly the Siol reference does not anticipate claims 1-3.

With regard to obviousness, it is submitted that the examiner is engaging in hindsight application of the specification of this application to the prior art. This is improper. In Re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984); In Re Haruna, 249 F.3d 1327, 58 U.S.P.Q. 1517 (Fed. Cir. 2001). Without an explicit teaching consistent with the intention of Siol taken in its entirety, a finding of obviousness based on the Siol reference would be improper. In re Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002).

Claims 1-16 are not obvious over the alleged Admission/Statement in the Specification in view of the cited Siol reference for the same reasons as stated above and further because the examiner's interpretation of the alleged Admissions/Statements in the Specification is erroneous.

The examiner cites the following statements in the Background section of the application as support for the proposition that the prior art discloses the claim elements of forming, distributing, incorporating and modifying. It is submitted that the examiner's interpretation of these statement is erroneous. The statements in the Specification that the examiner relies on are:

"Plastic films are currently widely used, particularly for packaging which are used mainly to package food products.....plastic films with improved characteristics are also known in the artplastic films with improved adhesion of inks and printing dyes, with 'barrier effect', and with 'smart' packaging capabilitiesproduction of plastic films having these improved characteristics can be based upon the surface application of substances on plastic films at the time of their use, i.e., long after their production."

These statements about the prior art clearly state that the prior art, to the extent it refers to treatment of a plastic film, is referring to treatment of a plastic film (a) after it has been cooled to room/ambient temperature and (b) only with a coating on the surface of the film.

The examiner seems to be interpreting these statements in the Background Section (pages 1 and 2) as meaning something other than what they really say. It is submitted that these statements in no way suggest or admit that an active substance is applied to a film during an extrusion of film process at a point in the extrusion process where an active substance gets incorporated into the body of the film to modify the characteristics of the film. To the contrary, these Statements merely refer to the prior art process of surface treating already formed, stable, cooled films.

These statements disclose no more than the Siol reference discloses, i.e. the surface treatment of a film that has been already formed.

Again, as discussed above, there is no suggestion in either or both of the Background Section of the application or in the Siol reference, or in their combined teachings, that an active substance is applied to a plastic film during an extrusion process to allow the active substance to be incorporated into the film to modify the basic characteristics of the polymer of the film itself.

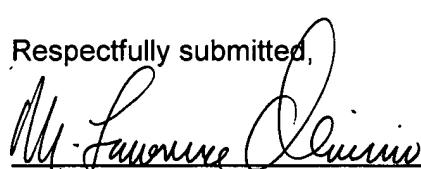
The intention and teaching of the Siol reference is the enablement of co-monomer polymerization conditions on one surface of a stable body. The cited Statements in the Background Section of the present application are to the same effect, i.e. "surface" treatment. To modify or read into the Siol reference or the Background Section of the Specification the steps of the presently claimed invention, would defeat the intended function and disclosure of Siol and the Background Section. In Re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984); In Re Haruna, 249 F.3d 1327, 58 U.S.P.Q. 1517 (Fed. Cir. 2001). Without an explicit teaching consistent with the intention of the cited statements in the Background and in Siol taken in their entirety, a finding of obviousness based on these cited disclosures would be improper. In re Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). A pertinent reference must disclose an enabling disclosure of the claimed invention. The disclosure of Siol calls for radical initiated polymerization on a surface. The disclosure of the Background Section refers to surface treatment after extrusion is complete. There is no enablement of the presently claimed invention disclosed in the Background Section or in Siol. There is only an enabling disclosure of a surface layer formed on a stable body surface.

Hindsight application of the invention described in a pending application to the prior art is improper. Surface treatment of a film teaches the opposite of the present invention.

CONCLUSION

For the reasons stated above, it is respectfully requested that the examiner's rejection of claims 1-16 of the present application be reversed and that the present application be allowed for issuance.

Respectfully submitted,


M. Lawrence Oliverio, Esq. Reg. No. 30,915
KUDIRKA & JOBSE, LLP
Customer Number 021127
Tel: (617) 367-4600 Fax: (617) 367-4656

Date: 1/15/2004

IX APPENDIX OF CLAIMS (37 C.F.R. 1.192(c)(9))

The text of the claims involved in the appeal are:

1. A method for producing a plastic film having improved characteristics, comprising forming the plastic film by extrusion from an extruder nozzle, the film emerging from the nozzle in a melted state, distributing at least one active substance on at least one face of the film, in a region of the film having a temperature higher than the ambient temperature such that the active substances penetrate into and are retained within the film to form a single body of film, cooling the film downstream of the extruder nozzle to a solidified state at ambient temperature wherein the one or more substances are permanently incorporated in the body of the film in the solidified state to modify selected characteristics of the film.
2. The method according to claim 1, wherein said region of the film lies between a point where the film leaves the extruder and a point where the film has a temperature at which dimensional stability thereof is reached.
3. The method according to claim 1, wherein said region of the film lies between a point where the film has a temperature at which dimensional stability thereof is reached and a point where the film has the ambient temperature.
4. The method according to claim 3, wherein a first one of said active substances is suitable to facilitate adhesion of inks or other chemical products on said film.
5. The method according to claim 4, wherein said active substances are selected from the group consisting of:
silanes;

titanium;
acetyl acetonate;
polyethylene imine;
ionomeric dispersions;
shellac;
mono- and dicarboxylic acids (acrylic, stearic acid);
copolyester dispersions;
dispersions of ethylene-acrylic acid (EAA) or methacrylic acid copolymer;
UV cross-linking acrylic resins;
acrylic (styrene-acrylic) dispersions;
acrylic resins;
acrylamide;
styrene-butadiene dispersions;
polar monomers.

6. The method according to claim 1, wherein said active substance provides said film with a "barrier effect" characteristic against the absorption of aromas, water vapor or UV rays.

7. The method according to claim 6, wherein said active substances are selected from the group consisting of:

dispersions of EVOH or PVOH;
polyvinyl acetate (PVAC) dispersions;
dispersions of ethylene-acrylic acid (EAA) or methacrylic acid copolymer;
UV cross-linking acrylic resins;
acrylic (styrene acrylic) disperse systems);
styrene-butadiene dispersions.

8. The method according to claim 1, wherein said active substance gives said film characteristics of high flow and surface slipperiness.
9. The method according to claim 8, wherein said active substance is an amide.
10. The method according to claim 1, wherein said active substances makes said film a crosslinking promoter.
11. The method according to claim 10, wherein said active substance is zinc stearate and/or caprolactam.
12. The method according to claim 1, wherein said active substance comprises a material that reacts when subsequently exposed to a selected treatment.
13. The method according to claim 12, wherein said active substance is an oxidizing salt.
14. The method according to claim 1, wherein identical or different active substances are nebulized on both faces of the film.
15. The method according to claim 1, wherein said active substance is constituted by microcapsules or micropearls which contain substances which are suitable to combine and/or interact with the film and whose shell withstands the temperatures of the region of the film in which they are introduced and can subsequently be activated in order to release the contents due to the application of energy obtained for example with ultraviolet rays, ultrasound or electromagnetic radiation.

16. The method according to claim 1, wherein said substance deposited and/or introduced in the film is a microfiber of glass, carbon and/or equivalent materials, alone or in combination, which are meant to vary the mechanical and/or surface strength characteristics of said film.



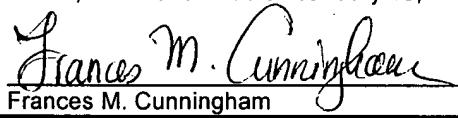
APPELLANT'S BRIEF UNDER
37 CFR §1.192

Docket No. M1025/7001

Applicant: Sterner et al.
Serial No: 09/578,236
Filed: May 24, 2000
For: Method For Producing A Plastic Film Having Improved Characteristics,
Apparatus For Performing the Method, and Film Thus Obtained
Examiner: Geoffrey Shipsides
Art Unit: 1732

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Assistant Commissioner for Patents, Board of Patent Appeals and Interferences, P.O. Box 1450, Alexandria, VA 22313-1450 on January 15, 2004.


Frances M. Cunningham

Assistant Commissioner for Patents
Board of Patent Appeals and Interferences
P.O. Box 1450
Alexandria, VA 22313-1450

This brief is in furtherance of the Notice of Appeal being filed concurrently herewith.

The fees required under § 1.17(c), and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief is transmitted in triplicate. (37 C.F.R. 1.192(a)) and contains these items under the following headings, and in the order set forth below (37 C.F.R. 1.192(c)):

I	REAL PARTY IN INTEREST.....	2
II	RELATED APPEALS AND INTERFERENCES	2
III	STATUS OF CLAIMS.....	2
IV	STATUS OF AMENDMENTS.....	2
V	SUMMARY OF INVENTION.....	2
VI	ISSUES.....	3
VII	GROUPING OF CLAIMS	3
VIII	ARGUMENTS	4
IX	APPENDIX OF CLAIMS INVOLVED IN THE APPEAL.....	9

I REAL PARTIES IN INTEREST (37 C.F.R. 1.192(c)(1))

The real party in interest in this appeal is BP Europak SpA.

II RELATED APPEALS AND INTERFERENCES (37 C.F.R. 1.192(c)(2))

There are no other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III STATUS OF CLAIMS (37 C.F.R. 1.192(c)(3))

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-24.

B. STATUS OF ALL THE CLAIMS IN APPLICATION

1. Claims pending: 1-16
2. Claims canceled:
3. Claims withdrawn from consideration, but not canceled: 17-24
4. Claims allowed: none
5. Claims rejected: 1-16

C. CLAIMS ON APPEAL

The claims on appeal are: 1-16.

IV STATUS OF AMENDMENTS (37 C.F.R. 1.192(c)(4))

All amendments submitted by applicant have been entered. The Request for Reconsideration of the patentability of claims 1-16 submitted by an amendment response of May 5, 2003 was considered by the examiner as indicated in the Final Office Action dated August 18, 2003.

V SUMMARY OF INVENTION (37 C.F.R. 1.192(c)(5))

The present invention relates to the formation of plastic film for use as packaging where the plastic film is provided during an extrusion process with a desired property that is not inherent in the plastic material itself. The plastic film is formed from an extruder and then treated during the extrusion with a substance that modifies the characteristics of the plastic film

material and imparts a desired property to the film. The substance is incorporated into the body of the film at a point during the extrusion process where film is in a molten state above ambient temperature such that the applied substance is permanently incorporated into the body to modify the characteristics of the polymer or where the film material itself is modified.

In the present application, claim 1 the sole independent claim in issue on this appeal, calls for a process as just described.

In contradistinction, the primary references cited by the examiner do not disclose incorporating a substance into the body of a plastic film to modify the characteristics of the film during an extrusion process or any process where the film is in a molten state.

VI ISSUES (37 C.F.R. 1.192(c)(6))

1. Whether claims 1-5 and 16 are unpatentable under 35 U.S.C. §102(b) as anticipated by the cited Krech reference.
2. Whether claims 1-3 are unpatentable under 35 U.S.C. §102(b) as anticipated by or obvious under Section 103 over the cited Siol reference.
3. Whether claims 4 and 6 are unpatentable under Section 103 as obvious over the cited Siol reference.
4. Whether the alleged statement in the specification concerning the prior art on Pages 1 and 2 is being properly construed by the examiner.
5. Whether claims 1-16 are unpatentable under Section 103 as obvious over the alleged statement of prior art in the specification on Pages 1 and 2 in view of the cited Siol reference.

VII GROUPING OF CLAIMS (37 C.F.R. 1.192(c)(7))

Group 1: Claims 1-5 and 16. These claims stand or fall as a group with regard to the examiner's Section 102 rejection based on the Krech reference.

Group 2: Claims 4 and 6. These claims stand or fall as a group with regard to the examiner's Section 103 rejection over the cited Siol reference.

Group 3: Claims 1-16. These claims stand or fall as a group with regard to the examiner's Section 103 rejection over the alleged statement of prior art in the specification in view of the cited Siol reference.

VIII ARGUMENT (37 C.F.R. 1.192(c)(8))

Anticipation of claims 1-5 and 16 has not been established at least because the cited Krech reference does not teach the claim elements of forming, distributing, incorporating or modifying the film.

In order for a Section 102(b) anticipation to exist, all material elements recited in a claim must be found in the one unit of prior art in issue. This is as true with regard to method/process claims as it is with product/apparatus claims. Application of Marshall, 198 U.S.P.Q. 344, 578 F.2d 301 (C.C.P.A. 1978).

Claim 1 of the present application, and thus all of the claims on appeal, claims 1-16, call for (a) forming the plastic film by extrusion from an extruder nozzle, (b) distributing at least one active substance on at least one face of the film such that the active substances penetrate into and are retained within the film to form a single body of film, (c) cooling the film wherein the one or more substances are permanently incorporated in the body of the film in the solidified state to (d) modify selected characteristics of the film.

The Krech reference does not teach or disclose any of these elements of the claims. The Krech reference deals with embedding solid particles on the surface of a plastic film by heating the particles and shooting them onto the surface of the film. The Krech particles are not an "active" substance. They do not interact with the polymer sheet material. They do not modify the properties of the polymer material. The applied particles have a physical property that remains contained within the particles themselves (such as an abrasion element).

The only purpose of the Krech process is to provide a mounting component for a solid particle, not to allow for modification of the characteristic of the polymer film material itself.

Therefore, none of the above referenced elements of the claims are anticipated or rendered obvious by the Krech reference.

It is fundamental that in order for a Section 102(b) anticipation to exist, the prior art reference must disclose all of the elements of the allegedly anticipated claims. Juicy Whip, Inc. v. Orange Bang, Inc., 63 U.S.P.Q.2d 1251, 292 F.3d 728 (Fed. Cir. 2002); Application of Marshall, 198 U.S.P.Q. 344, 578 F.2d 301 (C.C.P.A. 1978).

The claims in issue in this application are method claims. The standard for finding a Section 102(b) anticipation of a method claim is no less stringent than for an apparatus claim. In the Juicy Whip case for example, the Federal Circuit said:

When the asserted basis of invalidity is [Section 102(b) anticipation], the party with the burden of proof must show that "the subject of the barring activity met each of the limitations of the claim, and thus was an embodiment of the claimed invention." *Scaltech Inc. v. Retec/Tetra, L.L.C.*, 178 F.3d 1378, 1383, 51 USPQ2d 1055, 1058 (Fed.Cir.1999).

"Claim 6 is directed to a "method for inducing sales of a beverage" comprising the step of "positioning a transparent display bowl relative to the dispenser outlet to create the visual impression that said bowl is the reservoir and principal source from which a serving of the beverage is dispensed." '405 patent, col. 12, ll. 53-56. Claim 9 requires that the dispenser be "positioned relative to said outlet to create the visual impression that said container is the reservoir and principal source of said dispensed beverage issuing from said outlet." '405 patent, col. 13, ll. 10- 13. While the record contains testimony from several witnesses which, if believed by the jury, indicates that some of the claim limitations were found in the 1983 and 1988 dispensers, the record is devoid of evidence showing that the above limitations were found in either dispenser.

Similarly, in another method claim case, In Re Marshall, 198 U.S.P.Q. 344, 578 F.2d 301 (C.C.P.A. 1978), the appeals court (C.C.P.A.) stated:

Rejections under 35 U.S.C. s 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art. *In re Arkley*, 455 F.2d 586, 587, 59 CCPA 804, 807, 172 USPQ 524, 526 (1972). In other words, to constitute an **anticipation, all material elements** recited in a claim must be found in one unit of prior art. *Soundscriber Corp. v. United States*, 360 F.2d 954, 960, 175 Ct.Cl. 644, 148 USPQ 298, 301 (1966).

Applying this rule of law to the present case, we must reverse the board's rejection of claims 1-4 under 35 U.S.C. s 102 since the primary reference, the PDR, does not disclose every material element of the claimed subject matter. These **claims** are directed to a weight control **process**. Applicant uses an effective amount of the anesthetic, oxethazaine, to inhibit release of the pancreatic secretory hormones, secretin and pancreozymin, in order to control weight. The PDR, however, teaches using drugs containing the anesthetic oxethazaine to inhibit release of the acid-stimulating hormone, gastrin, in order to treat esophagitis, gastritis, peptic ulcer and irritable colon syndrome. Nothing in the PDR remotely suggests taking oxethazaine to lose weight

Anticipation and/or obvious of Claims 1-3 has not been established by/over the cited Siol reference, and, Claims 4 and 6 are not obvious over the cited Siol reference at least because the Siol reference does not disclose or suggest the claim elements of distributing, incorporating or modifying; and because Siol suggests the opposite.

Again, the claims in issue here are method claims and in order for a Section 102(b) anticipation to exist, the prior art reference must disclose all of the elements of the allegedly

anticipated claims. Juicy Whip, supra, 63 U.S.P.Q.2d 1251; Application of Marshall, supra, 198 U.S.P.Q. 344.

Siol (U.S. 4,184,207) describes a chemical polymerization method for deposition of co-monomers on the surface of polymer materials having an already stabilized shape, and, a subsequent heat treatment step for polymerization of the surface deposited co-monomers. In order to maintain a stable system, the substrate polymer body has to be cooled down (after the extrusion process), then it has to be coated with the co-monomers and then polymerization has to be carried out by means of heating in the absence of UV light. Siol (U.S. 4,184,207) is restricted to applying a superficial layer of radical initiated co-polymerized monomers on a single surface of a shaped body of plastic material such that the co-monomers are capable of undergoing a radical initiated reaction with each other upon a subsequent heat treatment and a subsequent cooling period in order to enable formation of the superficial layer. A scratch or weather resistant layer of cured co-polymer is thus formed on the surface of the stable body of plastic.

There are very different interactions occurring between the plastic bulk and the active substances applied in the present invention and the process described in the Siol reference. The Siol reference makes a single, vague statement in passing that the co-monomer coating can be applied directly after the extrusion process. However, there is no disclosure about the molten state of the extruded body, nor about its temperature (i.e. higher than the glass transition temperature or the room temperature), and, there is the explicit requirement that the deposition must allow for co-polymerization and curing upon heat treatment and cooling. This process, as described, suggests to a person skilled in the art that the co-monomers are deposited as a superficial layer of homogenous molecules, in immediate molecular level adjacency to each other to enable chemical reaction between the co-monomers such that the co-monomer molecules will react when heat treatment is applied. And, a subsequent cooling period is required for curing. That is, the Siol process requires a radical transfer between co-monomers where the molecules are physically adjacent to other to ensure propagation of radical polymerization between physically adjacent co-monomer molecules.

The present invention calls for distributing at least one active substance on at least one face of the film in a region of the film having a temperature higher than the ambient temperature such that the active substance(s) penetrate into and are retained within the film to form a single body of film and modifies the characteristics of the base polymer film.

The intention and teaching of Siol (U.S. 4,184,207) is the enablement of co-monomer polymerization conditions on a surface of a stable body. The purpose of Siol is "not" to modify the characteristics of the film itself but rather to place a layer of another substance on the "surface" of the film. To modify or read into the Siol reference the steps of the presently claimed

invention, would defeat the intended function and disclosure of Siol. Siol's teaching of placing a surface layer on the base polymer film teaches away from the present invention.

Clearly the Siol reference does not anticipate claims 1-3.

With regard to obviousness, it is submitted that the examiner is engaging in hindsight application of the specification of this application to the prior art. This is improper. In Re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984); In Re Haruna, 249 F.3d 1327, 58 U.S.P.Q. 1517 (Fed. Cir. 2001). Without an explicit teaching consistent with the intention of Siol taken in its entirety, a finding of obviousness based on the Siol reference would be improper. In re Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002).

Claims 1-16 are not obvious over the alleged Admission/Statement in the Specification in view of the cited Siol reference for the same reasons as stated above and further because the examiner's interpretation of the alleged Admissions/Statements in the Specification is erroneous.

The examiner cites the following statements in the Background section of the application as support for the proposition that the prior art discloses the claim elements of forming, distributing, incorporating and modifying. It is submitted that the examiner's interpretation of these statement is erroneous. The statements in the Specification that the examiner relies on are:

"Plastic films are currently widely used, particularly for packaging which are used mainly to package food products.....plastic films with improved characteristics are also known in the artplastic films with improved adhesion of inks and printing dyes, with 'barrier effect', and with 'smart' packaging capabilitiesproduction of plastic films having these improved characteristics can be based upon the surface application of substances on plastic films at the time of their use, i.e., long after their production."

These statements about the prior art clearly state that the prior art, to the extent it refers to treatment of a plastic film, is referring to treatment of a plastic film (a) after it has been cooled to room/ambient temperature and (b) only with a coating on the surface of the film.

The examiner seems to be interpreting these statements in the Background Section (pages 1 and 2) as meaning something other than what they really say. It is submitted that these statements in no way suggest or admit that an active substance is applied to a film during an extrusion of film process at a point in the extrusion process where an active substance gets incorporated into the body of the film to modify the characteristics of the film. To the contrary, these Statements merely refer to the prior art process of surface treating already formed, stable, cooled films.

These statements disclose no more than the Siol reference discloses, i.e. the surface treatment of a film that has been already formed.

Again, as discussed above, there is no suggestion in either or both of the Background Section of the application or in the Siol reference, or in their combined teachings, that an active substance is applied to a plastic film during an extrusion process to allow the active substance to be incorporated into the film to modify the basic characteristics of the polymer of the film itself.

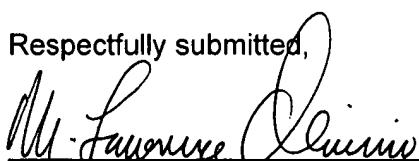
The intention and teaching of the Siol reference is the enablement of co-monomer polymerization conditions on one surface of a stable body. The cited Statements in the Background Section of the present application are to the same effect, i.e. "surface" treatment. To modify or read into the Siol reference or the Background Section of the Specification the steps of the presently claimed invention, would defeat the intended function and disclosure of Siol and the Background Section. In Re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984); In Re Haruna, 249 F.3d 1327, 58 U.S.P.Q. 1517 (Fed. Cir. 2001). Without an explicit teaching consistent with the intention of the cited statements in the Background and in Siol taken in their entirety, a finding of obviousness based on these cited disclosures would be improper. In re Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). A pertinent reference must disclose an enabling disclosure of the claimed invention. The disclosure of Siol calls for radical initiated polymerization on a surface. The disclosure of the Background Section refers to surface treatment after extrusion is complete. There is no enablement of the presently claimed invention disclosed in the Background Section or in Siol. There is only an enabling disclosure of a surface layer formed on a stable body surface.

Hindsight application of the invention described in a pending application to the prior art is improper. Surface treatment of a film teaches the opposite of the present invention.

CONCLUSION

For the reasons stated above, it is respectfully requested that the examiner's rejection of claims 1-16 of the present application be reversed and that the present application be allowed for issuance.

Respectfully submitted,



M. Lawrence Oliverio, Esq. Reg. No. 30,915
KUDIRKA & JOBSE, LLP
Customer Number 021127
Tel: (617) 367-4600 Fax: (617) 367-4656

Date: 1/15/2004

IX APPENDIX OF CLAIMS (37 C.F.R. 1.192(c)(9))

The text of the claims involved in the appeal are:

1. A method for producing a plastic film having improved characteristics, comprising forming the plastic film by extrusion from an extruder nozzle, the film emerging from the nozzle in a melted state, distributing at least one active substance on at least one face of the film, in a region of the film having a temperature higher than the ambient temperature such that the active substances penetrate into and are retained within the film to form a single body of film, cooling the film downstream of the extruder nozzle to a solidified state at ambient temperature wherein the one or more substances are permanently incorporated in the body of the film in the solidified state to modify selected characteristics of the film.
2. The method according to claim 1, wherein said region of the film lies between a point where the film leaves the extruder and a point where the film has a temperature at which dimensional stability thereof is reached.
3. The method according to claim 1, wherein said region of the film lies between a point where the film has a temperature at which dimensional stability thereof is reached and a point where the film has the ambient temperature.
4. The method according to claim 3, wherein a first one of said active substances is suitable to facilitate adhesion of inks or other chemical products on said film.
5. The method according to claim 4, wherein said active substances are selected from the group consisting of:
silanes;

titanium;
acetyl acetonate;
polyethylene imine;
ionomeric dispersions;
shellac;
mono- and dicarboxylic acids (acrylic, stearic acid);
copolyester dispersions;
dispersions of ethylene-acrylic acid (EAA) or methacrylic acid copolymer;
UV cross-linking acrylic resins;
acrylic (styrene-acrylic) dispersions;
acrylic resins;
acrylamide;
styrene-butadiene dispersions;
polar monomers.

6. The method according to claim 1, wherein said active substance provides said film with a "barrier effect" characteristic against the absorption of aromas, water vapor or UV rays.

7. The method according to claim 6, wherein said active substances are selected from the group consisting of:

dispersions of EVOH or PVOH;
polyvinyl acetate (PVAC) dispersions;
dispersions of ethylene-acrylic acid (EAA) or methacrylic acid copolymer;
UV cross-linking acrylic resins;
acrylic (styrene acrylic) disperse systems);
styrene-butadiene dispersions.

8. The method according to claim 1, wherein said active substance gives said film characteristics of high flow and surface slipperiness.
9. The method according to claim 8, wherein said active substance is an amide.
10. The method according to claim 1, wherein said active substances makes said film a crosslinking promoter.
11. The method according to claim 10, wherein said active substance is zinc stearate and/or caprolactam.
12. The method according to claim 1, wherein said active substance comprises a material that reacts when subsequently exposed to a selected treatment.
13. The method according to claim 12, wherein said active substance is an oxidizing salt.
14. The method according to claim 1, wherein identical or different active substances are nebulized on both faces of the film.
15. The method according to claim 1, wherein said active substance is constituted by microcapsules or micropearls which contain substances which are suitable to combine and/or interact with the film and whose shell withstands the temperatures of the region of the film in which they are introduced and can subsequently be activated in order to release the contents due to the application of energy obtained for example with ultraviolet rays, ultrasound or electromagnetic radiation.

16. The method according to claim 1, wherein said substance deposited and/or introduced in the film is a microfiber of glass, carbon and/or equivalent materials, alone or in combination, which are meant to vary the mechanical and/or surface strength characteristics of said film.



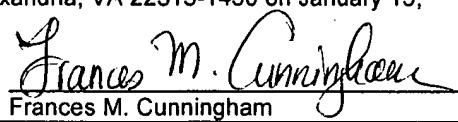
APPELLANT'S BRIEF UNDER
37 CFR §1.192

Docket No. M1025/7001

Applicant: Sterner et al.
Serial No: 09/578,236
Filed: May 24, 2000
For: Method For Producing A Plastic Film Having Improved Characteristics,
Apparatus For Performing the Method, and Film Thus Obtained
Examiner: Geoffrey Shipsides
Art Unit: 1732

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Assistant Commissioner for Patents, Board of Patent Appeals and Interferences, P.O. Box 1450, Alexandria, VA 22313-1450 on January 15, 2004.



Frances M. Cunningham

Assistant Commissioner for Patents
Board of Patent Appeals and Interferences
P.O. Box 1450
Alexandria, VA 22313-1450

This brief is in furtherance of the Notice of Appeal being filed concurrently herewith.

The fees required under § 1.17(c), and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief is transmitted in triplicate. (37 C.F.R. 1.192(a)) and contains these items under the following headings, and in the order set forth below (37 C.F.R. 1.192(c)):

I	REAL PARTY IN INTEREST.....	2
II	RELATED APPEALS AND INTERFERENCES	2
III	STATUS OF CLAIMS.....	2
IV	STATUS OF AMENDMENTS.....	2
V	SUMMARY OF INVENTION.....	2
VI	ISSUES.....	3
VII	GROUPING OF CLAIMS	3
VIII	ARGUMENTS	4
IX	APPENDIX OF CLAIMS INVOLVED IN THE APPEAL.....	9

I REAL PARTIES IN INTEREST (37 C.F.R. 1.192(c)(1))

The real party in interest in this appeal is BP Europak SpA.

II RELATED APPEALS AND INTERFERENCES (37 C.F.R. 1.192(c)(2))

There are no other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III STATUS OF CLAIMS (37 C.F.R. 1.192(c)(3))

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-24.

B. STATUS OF ALL THE CLAIMS IN APPLICATION

1. Claims pending: 1-16
2. Claims canceled:
3. Claims withdrawn from consideration, but not canceled: 17-24
4. Claims allowed: none
5. Claims rejected: 1-16

C. CLAIMS ON APPEAL

The claims on appeal are: 1-16.

IV STATUS OF AMENDMENTS (37 C.F.R. 1.192(c)(4))

All amendments submitted by applicant have been entered. The Request for Reconsideration of the patentability of claims 1-16 submitted by an amendment response of May 5, 2003 was considered by the examiner as indicated in the Final Office Action dated August 18, 2003.

V SUMMARY OF INVENTION (37 C.F.R. 1.192(c)(5))

The present invention relates to the formation of plastic film for use as packaging where the plastic film is provided during an extrusion process with a desired property that is not inherent in the plastic material itself. The plastic film is formed from an extruder and then treated during the extrusion with a substance that modifies the characteristics of the plastic film

material and imparts a desired property to the film. The substance is incorporated into the body of the film at a point during the extrusion process where film is in a molten state above ambient temperature such that the applied substance is permanently incorporated into the body to modify the characteristics of the polymer or where the film material itself is modified.

In the present application, claim 1 the sole independent claim in issue on this appeal, calls for a process as just described.

In contradistinction, the primary references cited by the examiner do not disclose incorporating a substance into the body of a plastic film to modify the characteristics of the film during an extrusion process or any process where the film is in a molten state.

VI ISSUES (37 C.F.R. 1.192(c)(6))

1. Whether claims 1-5 and 16 are unpatentable under 35 U.S.C. §102(b) as anticipated by the cited Krech reference.
2. Whether claims 1-3 are unpatentable under 35 U.S.C. §102(b) as anticipated by or obvious under Section 103 over the cited Siol reference.
3. Whether claims 4 and 6 are unpatentable under Section 103 as obvious over the cited Siol reference.
4. Whether the alleged statement in the specification concerning the prior art on Pages 1 and 2 is being properly construed by the examiner.
5. Whether claims 1-16 are unpatentable under Section 103 as obvious over the alleged statement of prior art in the specification on Pages 1 and 2 in view of the cited Siol reference.

VII GROUPING OF CLAIMS (37 C.F.R. 1.192(c)(7))

Group 1: Claims 1-5 and 16. These claims stand or fall as a group with regard to the examiner's Section 102 rejection based on the Krech reference.

Group 2: Claims 4 and 6. These claims stand or fall as a group with regard to the examiner's Section 103 rejection over the cited Siol reference.

Group 3: Claims 1-16. These claims stand or fall as a group with regard to the examiner's Section 103 rejection over the alleged statement of prior art in the specification in view of the cited Siol reference.

VIII ARGUMENT (37 C.F.R. 1.192(c)(8))

Anticipation of claims 1-5 and 16 has not been established at least because the cited Krech reference does not teach the claim elements of forming, distributing, incorporating or modifying the film.

In order for a Section 102(b) anticipation to exist, all material elements recited in a claim must be found in the one unit of prior art in issue. This is as true with regard to method/process claims as it is with product/apparatus claims. Application of Marshall, 198 U.S.P.Q. 344, 578 F.2d 301 (C.C.P.A. 1978).

Claim 1 of the present application, and thus all of the claims on appeal, claims 1-16, call for (a) forming the plastic film by extrusion from an extruder nozzle, (b) distributing at least one active substance on at least one face of the film such that the active substances penetrate into and are retained within the film to form a single body of film, (c) cooling the film wherein the one or more substances are permanently incorporated in the body of the film in the solidified state to (d) modify selected characteristics of the film.

The Krech reference does not teach or disclose any of these elements of the claims. The Krech reference deals with embedding solid particles on the surface of a plastic film by heating the particles and shooting them onto the surface of the film. The Krech particles are not an "active" substance. They do not interact with the polymer sheet material. They do not modify the properties of the polymer material. The applied particles have a physical property that remains contained within the particles themselves (such as an abrasion element).

The only purpose of the Krech process is to provide a mounting component for a solid particle, not to allow for modification of the characteristic of the polymer film material itself.

Therefore, none of the above referenced elements of the claims are anticipated or rendered obvious by the Krech reference.

It is fundamental that in order for a Section 102(b) anticipation to exist, the prior art reference must disclose all of the elements of the allegedly anticipated claims. Juicy Whip, Inc. v. Orange Bang, Inc., 63 U.S.P.Q.2d 1251, 292 F.3d 728 (Fed. Cir. 2002); Application of Marshall, 198 U.S.P.Q. 344, 578 F.2d 301 (C.C.P.A. 1978).

The claims in issue in this application are method claims. The standard for finding a Section 102(b) anticipation of a method claim is no less stringent than for an apparatus claim. In the Juicy Whip case for example, the Federal Circuit said:

When the asserted basis of invalidity is [Section 102(b) anticipation], the party with the burden of proof must show that "the subject of the barring activity met each of the limitations of the claim, and thus was an embodiment of the claimed invention." *Scaltech Inc. v. Retec/Tetra, L.L.C.*, 178 F.3d 1378, 1383, 51 USPQ2d 1055, 1058 (Fed.Cir.1999).

"Claim 6 is directed to a "method for inducing sales of a beverage" comprising the step of "positioning a transparent display bowl relative to the dispenser outlet to create the visual impression that said bowl is the reservoir and principal source from which a serving of the beverage is dispensed." '405 patent, col. 12, ll. 53-56. Claim 9 requires that the dispenser be "positioned relative to said outlet to create the visual impression that said container is the reservoir and principal source of said dispensed beverage issuing from said outlet." '405 patent, col. 13, ll. 10- 13. While the record contains testimony from several witnesses which, if believed by the jury, indicates that some of the claim limitations were found in the 1983 and 1988 dispensers, the record is devoid of evidence showing that the above limitations were found in either dispenser.

Similarly, in another method claim case, In Re Marshall, 198 U.S.P.Q. 344, 578 F.2d 301 (C.C.P.A. 1978), the appeals court (C.C.P.A.) stated:

Rejections under 35 U.S.C. s 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art. *In re Arkley*, 455 F.2d 586, 587, 59 CCPA 804, 807, 172 USPQ 524, 526 (1972). In other words, to constitute an **anticipation, all material elements** recited in a claim must be found in one unit of prior art. *Soundscriber Corp. v. United States*, 360 F.2d 954, 960, 175 Ct.Cl. 644, 148 USPQ 298, 301 (1966).

Applying this rule of law to the present case, we must reverse the board's rejection of claims 1-4 under 35 U.S.C. s 102 since the primary reference, the PDR, does not disclose every material element of the claimed subject matter. These **claims** are directed to a weight control **process**. Applicant uses an effective amount of the anesthetic, oxethazaine, to inhibit release of the pancreatic secretory hormones, secretin and pancreozymin, in order to control weight. The PDR, however, teaches using drugs containing the anesthetic oxethazaine to inhibit release of the acid-stimulating hormone, gastrin, in order to treat esophagitis, gastritis, peptic ulcer and irritable colon syndrome. Nothing in the PDR remotely suggests taking oxethazaine to lose weight

Anticipation and/or obvious of Claims 1-3 has not been established by/over the cited Siol reference, and, Claims 4 and 6 are not obvious over the cited Siol reference at least because the Siol reference does not disclose or suggest the claim elements of distributing, incorporating or modifying; and becaus Siol sugg sts the opposite.

Again, the claims in issue here are method claims and in order for a Section 102(b) anticipation to exist, the prior art reference must disclose all of the elements of the allegedly

anticipated claims. Juicy Whip, supra, 63 U.S.P.Q.2d 1251; Application of Marshall, supra, 198 U.S.P.Q. 344.

Siol (U.S. 4,184,207) describes a chemical polymerization method for deposition of co-monomers on the surface of polymer materials having an already stabilized shape, and, a subsequent heat treatment step for polymerization of the surface deposited co-monomers. In order to maintain a stable system, the substrate polymer body has to be cooled down (after the extrusion process), then it has to be coated with the co-monomers and then polymerization has to be carried out by means of heating in the absence of UV light. Siol (U.S. 4,184,207) is restricted to applying a superficial layer of radical initiated co-polymerized monomers on a single surface of a shaped body of plastic material such that the co-monomers are capable of undergoing a radical initiated reaction with each other upon a subsequent heat treatment and a subsequent cooling period in order to enable formation of the superficial layer. A scratch or weather resistant layer of cured co-polymer is thus formed on the surface of the stable body of plastic.

There are very different interactions occurring between the plastic bulk and the active substances applied in the present invention and the process described in the Siol reference. The Siol reference makes a single, vague statement in passing that the co-monomer coating can be applied directly after the extrusion process. However, there is no disclosure about the molten state of the extruded body, nor about its temperature (i.e. higher than the glass transition temperature or the room temperature), and, there is the explicit requirement that the deposition must allow for co-polymerization and curing upon heat treatment and cooling. This process, as described, suggests to a person skilled in the art that the co-monomers are deposited as a superficial layer of homogenous molecules, in immediate molecular level adjacency to each other to enable chemical reaction between the co-monomers such that the co-monomer molecules will react when heat treatment is applied. And, a subsequent cooling period is required for curing. That is, the Siol process requires a radical transfer between co-monomers where the molecules are physically adjacent to other to ensure propagation of radical polymerization between physically adjacent co-monomer molecules.

The present invention calls for distributing at least one active substance on at least one face of the film in a region of the film having a temperature higher than the ambient temperature such that the active substance(s) penetrate into and are retained within the film to form a single body of film and modifies the characteristics of the base polymer film.

The intention and teaching of Siol (U.S. 4,184,207) is the enablement of co-monomer polymerization conditions on a surface of a stable body. The purpose of Siol is "not" to modify the characteristics of the film itself but rather to place a layer of another substance on the "surface" of the film. To modify or read into the Siol reference the steps of the presently claimed

invention, would defeat the intended function and disclosure of Siol. Siol's teaching of placing a surface layer on the base polymer film teaches away from the present invention.

Clearly the Siol reference does not anticipate claims 1-3.

With regard to obviousness, it is submitted that the examiner is engaging in hindsight application of the specification of this application to the prior art. This is improper. In Re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984); In Re Haruna, 249 F.3d 1327, 58 U.S.P.Q. 1517 (Fed. Cir. 2001). Without an explicit teaching consistent with the intention of Siol taken in its entirety, a finding of obviousness based on the Siol reference would be improper. In re Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002).

Claims 1-16 are not obvious over the alleged Admission/Statement in the Specification in view of the cited Siol reference for the same reasons as stated above and further because the examiner's interpretation of the alleged Admissions/Statements in the Specification is erroneous.

The examiner cites the following statements in the Background section of the application as support for the proposition that the prior art discloses the claim elements of forming, distributing, incorporating and modifying. It is submitted that the examiner's interpretation of these statement is erroneous. The statements in the Specification that the examiner relies on are:

"Plastic films are currently widely used, particularly for packaging which are used mainly to package food products.....plastic films with improved characteristics are also known in the artplastic films with improved adhesion of inks and printing dyes, with 'barrier effect', and with 'smart' packaging capabilitiesproduction of plastic films having these improved characteristics can be based upon the surface application of substances on plastic films at the time of their use, i.e., long after their production."

These statements about the prior art clearly state that the prior art, to the extent it refers to treatment of a plastic film, is referring to treatment of a plastic film (a) after it has been cooled to room/ambient temperature and (b) only with a coating on the surface of the film.

The examiner seems to be interpreting these statements in the Background Section (pages 1 and 2) as meaning something other than what they really say. It is submitted that these statements in no way suggest or admit that an active substance is applied to a film during an extrusion of film process at a point in the extrusion process where an active substance gets incorporated into the body of the film to modify the characteristics of the film. To the contrary, these Statements merely refer to the prior art process of surface treating already formed, stable, cooled films.

These statements disclose no more than the Siol reference discloses, i.e. the surface treatment of a film that has been already formed.

Again, as discussed above, there is no suggestion in either or both of the Background Section of the application or in the Siol reference, or in their combined teachings, that an active substance is applied to a plastic film during an extrusion process to allow the active substance to be incorporated into the film to modify the basic characteristics of the polymer of the film itself.

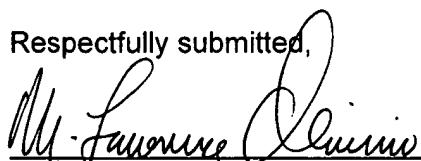
The intention and teaching of the Siol reference is the enablement of co-monomer polymerization conditions on one surface of a stable body. The cited Statements in the Background Section of the present application are to the same effect, i.e. "surface" treatment. To modify or read into the Siol reference or the Background Section of the Specification the steps of the presently claimed invention, would defeat the intended function and disclosure of Siol and the Background Section. In Re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984); In Re Haruna, 249 F.3d 1327, 58 U.S.P.Q. 1517 (Fed. Cir. 2001). Without an explicit teaching consistent with the intention of the cited statements in the Background and in Siol taken in their entirety, a finding of obviousness based on these cited disclosures would be improper. In re Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). A pertinent reference must disclose an enabling disclosure of the claimed invention. The disclosure of Siol calls for radical initiated polymerization on a surface. The disclosure of the Background Section refers to surface treatment after extrusion is complete. There is no enablement of the presently claimed invention disclosed in the Background Section or in Siol. There is only an enabling disclosure of a surface layer formed on a stable body surface.

Hindsight application of the invention described in a pending application to the prior art is improper. Surface treatment of a film teaches the opposite of the present invention.

CONCLUSION

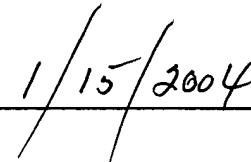
For the reasons stated above, it is respectfully requested that the examiner's rejection of claims 1-16 of the present application be reversed and that the present application be allowed for issuance.

Respectfully submitted,



M. Lawrence Oliverio, Esq. Reg. No. 30,915
KUDIRKA & JOBSE, LLP
Customer Number 021127
Tel: (617) 367-4600 Fax: (617) 367-4656

Date:



IX APPENDIX OF CLAIMS (37 C.F.R. 1.192(c)(9))

The text of the claims involved in the appeal are:

1. A method for producing a plastic film having improved characteristics, comprising forming the plastic film by extrusion from an extruder nozzle, the film emerging from the nozzle in a melted state, distributing at least one active substance on at least one face of the film, in a region of the film having a temperature higher than the ambient temperature such that the active substances penetrate into and are retained within the film to form a single body of film, cooling the film downstream of the extruder nozzle to a solidified state at ambient temperature wherein the one or more substances are permanently incorporated in the body of the film in the solidified state to modify selected characteristics of the film.
2. The method according to claim 1, wherein said region of the film lies between a point where the film leaves the extruder and a point where the film has a temperature at which dimensional stability thereof is reached.
3. The method according to claim 1, wherein said region of the film lies between a point where the film has a temperature at which dimensional stability thereof is reached and a point where the film has the ambient temperature.
4. The method according to claim 3, wherein a first one of said active substances is suitable to facilitate adhesion of inks or other chemical products on said film.
5. The method according to claim 4, wherein said active substances are selected from the group consisting of:
silanes;

titanium;
acetyl acetone;
polyethylene imine;
ionomeric dispersions;
shellac;
mono- and dicarboxylic acids (acrylic, stearic acid);
copolyester dispersions;
dispersions of ethylene-acrylic acid (EAA) or methacrylic acid copolymer;
UV cross-linking acrylic resins;
acrylic (styrene-acrylic) dispersions;
acrylic resins;
acrylamide;
styrene-butadiene dispersions;
polar monomers.

6. The method according to claim 1, wherein said active substance provides said film with a "barrier effect" characteristic against the absorption of aromas, water vapor or UV rays.

7. The method according to claim 6, wherein said active substances are selected from the group consisting of:

dispersions of EVOH or PVOH;
polyvinyl acetate (PVAC) dispersions;
dispersions of ethylene-acrylic acid (EAA) or methacrylic acid copolymer;
UV cross-linking acrylic resins;
acrylic (styrene acrylic) disperse systems;
styrene-butadiene dispersions.

8. The method according to claim 1, wherein said active substance gives said film characteristics of high flow and surface slipperiness.
9. The method according to claim 8, wherein said active substance is an amide.
10. The method according to claim 1, wherein said active substances makes said film a crosslinking promoter.
11. The method according to claim 10, wherein said active substance is zinc stearate and/or caprolactam.
12. The method according to claim 1, wherein said active substance comprises a material that reacts when subsequently exposed to a selected treatment.
13. The method according to claim 12, wherein said active substance is an oxidizing salt.
14. The method according to claim 1, wherein identical or different active substances are nebulized on both faces of the film.
15. The method according to claim 1, wherein said active substance is constituted by microcapsules or micropearls which contain substances which are suitable to combine and/or interact with the film and whose shell withstands the temperatures of the region of the film in which they are introduced and can subsequently be activated in order to release the contents due to the application of energy obtained for example with ultraviolet rays, ultrasound or electromagnetic radiation.

16. The method according to claim 1, wherein said substance deposited and/or introduced in the film is a microfiber of glass, carbon and/or equivalent materials, alone or in combination, which are meant to vary the mechanical and/or surface strength characteristics of said film.